

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1 – 10: Cancelled

11. (New) A method of producing a chewing gum for remineralization of tooth enamel, including the steps of:

preparing an aqueous solution of at least one acidifying agent that is suitable as a foodstuff;

adding a reactive calcium source to said aqueous solution;

adding the solution to a thickener, wherein phosphoric acid is added during at least one of said preparing and adding steps;

thoroughly mixing all components to form a gum;

shaping said gum; and

drying the gum.

12. (New) A method according to claim 11, wherein said thickener is gelatin in a ground or swollen state.

13. (New) A method according to claim 11, which includes mixing various acidifying agents as a reactant for said preparing step.

14. (New) A method according to claim 11, wherein said at least one acidifying agent comprises at least one of the group consisting of carboxylic acids and fruit acids.

15. (New) A method according to claim 14, wherein said carboxylic acids include lactic acid.

16. (New) A method according to claim 14, wherein said fruit acids include pyruvic

acid, citric acid and malic acid.

17. (New) A method according to claim 11, wherein said aqueous solution of said preparing step contains a calcium-complexing acid, and wherein a further calcium-complexing acid is added to such aqueous solution that is more powerful than is said first calcium-complexing acid.

18. (New) A method according to claim 17, wherein said further calcium-complexing acid is malic acid or citric acid, and wherein said first calcium-complexing acid is pyruvic acid.

19. (New) A method according to claim 11, wherein said calcium source is at least one of the group consisting of calcium oxide, calcium hydroxide and calcium carbonate.

20. (New) A chewing gum produced by the method of claim 11.

21. (New) A chewing gum for remineralization of tooth enamel and comprising a calcium content of between 30 and 190 mMol/kg (1.4 to 9.0 g/kg) of finished product.

22. (New) A chewing gum according to claim 21, which comprises a phosphoric acid content of between 15 and 500 mMol/kg of finished product.

23. (New) A chewing gum according to claim 21, wherein said calcium content is between 50 and 150 mMol/kg of finished product.